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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Yukari Katayama

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EXAMINER

DADA, BEEMNET W

ART UNIT

PAPER NUMBER

2135

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/811,405

Applicant(s)

KATAYAMA ET AL.

Examiner

Beemnet W. Dada

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 March 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 10-22 is/are rejected.  
7) ☒ Claim(s) 23-26 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This office action is in reply to an amendment filed on March 02, 2006. Claim 15 has been amended and new claims 23-26 have been added. Claims 10-26 are pending.

### *Response to Arguments*

2. Applicant's arguments filed on March 02, 2006, with respect to claims 10-22 have been fully considered but they are not persuasive. Applicant argues that the art on record fails to teach a data randomizing method wherein the seed data is data which is produced by using a different value for every time of rewriting data, and the art on record always uses the same initialization value at the same memory location. Examiner disagrees.

3. Examiner would point out that Moriya (US 5,867,475) teaches using different value of seed data at an interval of eight sectors [column 11, lines 7-14] and furthermore, Whaley (US 6,052,817) teaches a data randomizing method wherein a different value of seed data is used as the seed data for every time of writing data [column 2, line 53 – column 3, line 6]. In Whaley, a new initialization value is determined for every access request (for example for every write operation), where the initialization value comprises the 4 least significant bits of the storage location [column 6, lines 32-48], which implies for different storage locations different value of seed data is used as the seed data for every time of rewriting data, and therefore Whaley meets the above limitation. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., seed data which is different value for every time of **rewriting data to a same memory location**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). It is true that the art on record

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always uses the same initialization value at the same memory location, however such limitations are not recited in the rejected claims 10-22.

4. Applicant further argues that the Moriya fails to teach adding seed data for randomizing, to subject data to be recorded on the recording medium. Examiner disagrees.

5. Examiner would point out that Moriya teaches a data-randomizing method for an optical disk apparatus adapted to record data on recording medium by light, and read data on the recording medium by utilizing a difference in reflectance [see column 3, lines 47-59], including, adding seed data (i.e., initial value) for randomizing, to subject data to be recorded on the recording medium [column 9, lines 45-63 and column 10, lines 13-22]. Examiner asserts that the art on record teaches the claimed limitation and therefore the rejection is respectfully maintained.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriya et al US Patent 5,867,475 (hereinafter Moriya) in view of Whaley US Patent 6,052,817.

8. As per claims 10, 12, 15, 21 and 22, Moriya teaches a data-randomizing method for an optical disk apparatus adapted to record data on recording medium by light, and read data on

the recording medium by utilizing a difference in reflectance [see column 3, lines 47-59],  
comprising:

adding seed data (i.e., initial value) for randomizing, to subject data to be recorded on  
the recording medium [column 9, lines 45-63 and column 10, lines 13-22], and

determining at least one bit randomized data by operating at least one bit data added  
seed data to the data and multiple bit randomized data, which was made from at least one bit  
added seed data and multiple randomized bit data [column 10, lines 13-22 and lines 33-44].

Moriya further teaches using different value of seed data at an interval of eight sectors  
[column 11, lines 7-14]. Moriya is silent on using different value of seed data in every time of  
rewriting data. However, within the same field of endeavor, Whaley teaches a data randomizing  
method wherein a different value of seed data is used as the seed data for every time of writing  
data [column 2, line 53 – column 3, line 6]. Therefore, it would have been obvious to one having  
ordinary skill in the art at the time of applicant's invention to employ the teachings of Whaley  
within the system of Moriya in order to further provide efficient error correction method.

9. As per claim 11, Moriya further teaches determining one-bit- de-randomized data by  
operation using multiple bit randomized data [column 16, lines 37-50 and column 12, lines 16-  
25].

10. As per claims 13 and 14, Moriya further teaches the data recorded on the recording  
medium is data recorded by adding error corrected code (i.e., ECC) after randomizing by the  
data-randomizing method [column 12, lines 30-39].

11. As per claims 16-18, Moriya further teaches data is randomized in every fixed unit and data of a fixed unit contains address identification including at least ID, user data, and an error detection code [column 9, lines 50-57].

12. As per claims 19-20, Moriya further teaches an order of data arrangement for data randomizing is similar to an order of an error correction code word for decoding [column 16, lines 29-40].

### ***Allowable Subject Matter***

13. Claims 23-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beemnet W. Dada whose telephone number is (571) 272-3847. The examiner can normally be reached on Monday - Friday (9:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beemnet Dada

May 5, 2006

  
HOSUK SONG  
PRIMARY EXAMINER